

Application No.: 09/990,995

Docket No.: JCLA7630

REMARKS**Present Status of the Application**

The Office Action rejected all pending claims 1-15. Specifically, the Office Action rejected claims 6 and 8-15 under 35 U.S.C. 102(e), as being anticipated by Klinger (U.S. 6523071). The Office Action also rejected claims 1-5 and 7 under 35 U.S.C. 103(a) as being unpatentable over Klinger in view of common digital design techniques, as evidenced by Rackley (U.S. 5365122). Applicants have amended claims 6, 13 and 14 to improve clarity. After entry of the foregoing amendments, claims 1-12 and 14-15 remain pending in the present application, and reconsideration of those claims is respectfully requested.

Discussion of Office Action Rejections

The Office Action rejected claims 6 and 8-15 under 35 U.S.C. 102(e), as being anticipated by Klinger. After amendment, claims 6, 8-12 and 14-15 are applied, and applicants respectfully traverse the rejections for at least the reasons set forth below.

To anticipate a claim, the reference must teach each and every element of the claim. M.P.E.P. § 2131. However, the Klinger at least does not teach the feature of "...wherein said latching device further includes a clear terminal such that said output terminal of said latching device is reset to a low potential when said clear terminal is triggered by a system reset signal" as claimed in claim 6.

More specifically, the present invention provides an apparatus for improving the detection of IDE cables. In order to achieve this objective, the present invention provides a

Application No.: 09/990,995

Docket No.: JCLA7630

simple circuit consisting of a D-type flip flop and a general purpose I/O controller. The present invention describes that Cable configuration diagnostic signal (PDIAG- : CBLID-) is connected to the clocking (CLK) terminal of the D-type flip-flops 31 and 33 via primary and secondary IDE channels(PD&SD). In addition, the data input terminal (D) of the D type flip-flop is connected to a high level reference voltage and the clear terminal (CL) is triggered by a system reset. (Para 0021-0022). However, Klinger describes a system and method for distinguishing between high and low quality cable. The system includes a sampling circuit 41, which includes a plurality of latches. sampling circuit 41 has its own reset control signal which is independent from the main system reset signal (i.e. the system reset in the present application). The use of a D-latch having its own reset control or any other circuit has also been proposed. In addition, the internal reset of sampling Circuit 41 is arranged to occur before the main system reset control signal (Column 6, line30-40).

Therefore, Klinger differs from the present invention, as the D flip-flops 31 and 32 employed in the present invention are reset by the system reset signal. Hence, these flip-flops do not require any additional reset circuitry of their own. The present invention obviously provides a much-simplified circuit than that proposed by Klinger by claimed definition in claim 6 of the present application, and Klinger does not anticipate claim 6.

For at least the same reasons, Klinger does not anticipate claims 7-12 and 14 as a matter of law.

For at least the same reasons, Klinger does not anticipate claim 15 since Klinger does not teach the feature of "... a plurality of latching devices connected to said IDE bus cable and said

Application No.: 09/990,995

Docket No.: JCLA7630

detection device; wherein each said latching device has a triggering terminal, a clear terminal and an output terminal ... said clear terminal triggered by a system reset so that said output terminal of said latching device is reset to a low potential ..." as claimed in claim 15.

Furthermore, the present application could not be obtained by combining Klinger and common digital design because Klinger needs special timing of the sampling circuit to correctly perform its function. That is, the sampling circuit needs a reset signal previous to the system reset for normally operation, and therefore a single system reset cannot make Klinger work correctly.

The Office Action further rejected claims 1-5 and 7 under 35 USC 103(a) as being unpatentable over Klinger in view of common digital design techniques, as evidenced by Rackley. After entering the amendment set forth above, applicants respectfully traverse the rejections.

For at least the same reasons set forth above, Klinger does not disclose, teach or suggest the feature of "... wherein said clear terminal can be triggered by a system reset so that said output terminal of said D-type flip-flop is reset to a low potential ..." as claimed in claim 1. Furthermore, because Klinger needs special timing of the sampling circuit to correctly perform Klinger's technique, combination of Klinger and common digital design techniques should not use the main reset signal (or system reset in the present application) for reset the latches. That is, the sampling circuit needs a reset signal previous to the system reset for normally operation, and therefore a single system reset cannot make Klinger work correctly.

Accordingly, combination of Klinger and common digital design techniques, as evidenced by Rackley, cannot suggest the feature of "... wherein said clear terminal can be

Application No.: 09/990,995

Docket No.: JCLA7630

triggered by a system reset so that said output terminal of said D-type flip-flop is reset to a low potential ...". Therefore, claim 1 is patentable over Klinger in view of common digital design techniques, such as Rackley.

For at least the same reason, claims 2-5 are patentable over Klinger in view of common digital design techniques as a matter of law.

For at least the same reason, claim 7 is patentable over Klinger in view of common digital design techniques as a matter of law since claim 6, which is depended by claim 7, claims the like technique as that claimed in claim 1.

For at least the foregoing reasons, Applicant respectfully submits that independent claims 1, 6 and 15 patently define over the prior art references, and should be allowed. For at least the same reasons, dependent claims 2-5, 7-12 and 14 patently define over the prior art as well.

Application No.: 09/990,995

Docket No.: JCLA7630

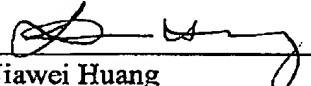
CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 1-12 and 14-15 are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Date: 7/23/2004

4 Venture, Suite 250
Irvine, CA 92618
Tel.: (949) 660-0761
Fax: (949) 660-0809

Respectfully submitted,
J.C. PATENTS


Jiawei Huang
Registration No. 43,330